

## Description of the Proposed Action

The project area is located in the northeast quadrant of Spokane County and the city of Spokane (see Figure S-1, Vicinity Map). The proposed action is to improve transportation safety and mobility through the city of Spokane and Spokane County between Interstate 90 (I-90), northeastern Washington, and Canada. The action will ultimately provide a four- to eight-lane fully controlled access highway between I-90 on the south terminus, kilometer post (KP) 456.15 (MP 283.44), and US 2/US 395 on the northern terminus. The length of the North Spokane Freeway (NSF) is approximately 16.1 kilometers (10 miles) and includes up to seven interchanges. In addition, about 5.6 kilometers (3.5 miles) of I-90, centered around the NSF/I-90 Interchange connection, will require new construction. The project will provide a transportation facility that will accommodate high volume traffic movements, including high capacity transportation systems, between I-90 and areas north. This will help reduce the congestion and related operational problems on city streets and county roads such as Division Street and Market Street, and will remove regional trips from local streets.

This project meets the following specific objectives:

- As much as practicable, reduce congestion in the overall transportation system projected for Design Year 2020.
- Improve system linkage between major northside arterial and state routes, reflected in reduced travel times.
- Be consistent with regional planning, to meet the needs of the Washington State Growth Management Act (GMA) as implemented in Spokane County.

These first three objectives (above) were based on needs developed in Spokane Regional Council's (SRC), North Spokane Transportation Study-Long Term Improvements final report published in August of 1988.

- Support or facilitate the implementation of multimodal use concepts, such as a high capacity transportation corridor. This is based on needs identified in SRC's High Capacity Transportation Study.
- Conform to the State Implementation Plan (SIP) for CO and PM<sub>10</sub>. This is a requirement of Federal Law because Spokane is located in a non-attainment area for carbon monoxide.
- Accommodate or improve intermodal transfers such as park and ride lots and rail/truck freight movement. The IDT recognized that economics require new facilities to promote efficiency and reduce cost for movement of freight and people.
- Provide for safe movement of people and freight by providing a limited access facility that has fewer points of conflict than local signalized major arterials.

The IDT recognized the existing northside urban arterials, due to their design, have considerably higher accident rates than that of a limited access facility.

- Improve energy efficiency in the moving of people and freight. The IDT recognized that energy resources are finite and require conservation.

## Public and Agency Coordination

This project can be expected to have significant social, economic, or environmental impacts. In accordance with guidance found in the Washington State Department of Transportation (WSDOT) *Design Manual*, an Interdisciplinary Team (IDT) was appointed in February 1991 to help direct design and environmental studies. The IDT consists of seven members representing various agencies that have an interest in the project. These agencies include the city of Spokane, Spokane County, Spokane Area Economic Development Council, Spokane Regional Transportation Council (SRTC), Washington State Department of Ecology (Ecology), Washington State Office of Archaeology and Historic Preservation (OAHP) and WSDOT.

### Cooperating Agencies

The Bonneville Power Administration (BPA) and the Environmental Protection Agency (EPA) are serving as cooperating agencies for this project. The BPA has jurisdiction over a large amount of land on the north end of the project, and the “build” routes cross several BPA power transmission lines. The EPA is a cooperating agency based on its jurisdiction, under the Safe Drinking Water Act, over the Spokane Valley-Rathdrum Prairie Aquifer. The Army Corps of Engineers (Corps) has declined to be a cooperating agency. At this time, a Nationwide 404 Permit, which does not require the Corps to be a cooperating agency, appears sufficient for the designs proposed.

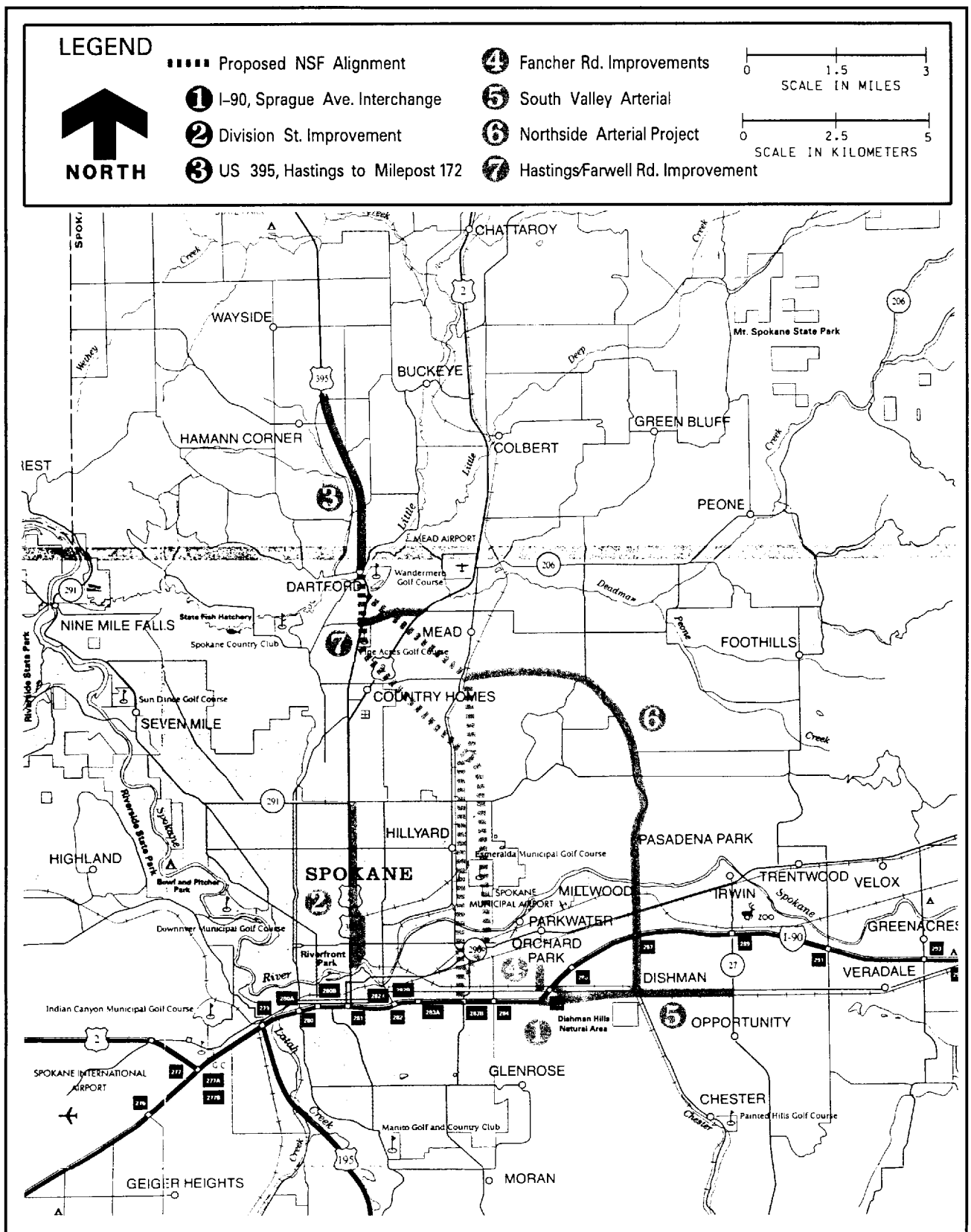
### General Coordination

The NSF project has been coordinated with other affected agencies and major property owners along the corridor. Meetings have been held with the Spokane County Planning Commission, area emergency services, Community Colleges of Spokane, Kaiser Aluminum and Chemical Corporation (KACC), Burlington Northern Railroad (BNRR), Spokane Parks and Recreation Department, Spokane School District 81, and Mead School District.

### Public Involvement

The public involvement plan for the North Spokane Freeway (NSF) Environmental Impact Statement (EIS) used the following two approaches to ensure inclusion of businesses, private citizens, federal, state, and local agencies, and other interested groups in the EIS process:

- Disseminating information to the general public, businesses, citizen groups, and public agencies and officials.
- Holding open houses and community meetings.



**North Spokane Freeway Vicinity Map**  
**Figure S-1**

Two public open houses have been held for this project, and several informational newsletters have been published. The first open house was held in July 1991, and the second was in October 1992. WSDOT has also given numerous presentations at the request of different organizations and neighborhood groups. A formal presentation and a question and answer period were included at each of the meetings, to provide detailed information about the specific area represented by the

organization. This gave people the chance to ask pertinent question regarding their area of interest.

A Citizens Advisory Committee (CAC) was formed on August 18, 1992, to provide another means of communication between the public and WSDOT. The purpose of the CAC is to relay concerns and comments from its organizations to WSDOT and supply the organizations with information on the development of the EIS. Several organized neighborhood groups are also involved in interactive communication with WSDOT.

## **Related Actions**

### ***I-90 — Four Lakes to Idaho State Line***

Improvements identified in the Four Lakes to Idaho State Line EIS (Four Lakes) for the section of I-90 impacted by this project (Liberty Park to Sprague Avenue Interchanges) remain part of the long-range I-90 plan. Identified capacity/safety improvements include:

- I-90 would be widened from three to four lanes each way. A fifth (auxiliary) lane would be constructed between adjacent interchange on/off ramps.
- The existing Second Avenue off-ramp would remain open.
- The existing Second Avenue on-ramp would be closed.
- A Third Avenue (eastbound) on-ramp would be constructed.
- The existing Third Avenue (westbound) off-ramp would be closed.
- All Altamont Ramps would be closed.
- The Thor/Freya interchange would be reconstructed to accommodate greater traffic volumes.
- The existing Custer Street ramps would be closed (per EIS reevaluation).
- The Sprague Avenue interchange would be reconstructed (see discussion below).

As these projects appear on priority lists and funding is made available, they will be closely examined. Individual projects may require modification from the intent of the original EIS to verify needs and compatibility with any proposed NSF improvements. Due to the extensive reconstruction of I-90 proposed by this EIS, none of the above-mentioned projects were considered to be applicable under a new facility scenario.

**Construction of the North Spokane Freeway with an interchange access to Interstate 90 in the vicinity of Thor and Freya while superseding a section of the Four Lakes**

EIS does not alter nor lessen many of the construction needs that it addresses. That portion of I-90 between the Liberty Park and Sprague Avenue Interchanges is altered.

Building the additional lanes parallel to the interstate for collecting and distributing traffic to and from the NSF facility changes the ultimate lane configuration proposed in Four Lakes. Building of the C/D will eliminate the need to widen this section of the interstate.

The Thor/Freya interchange will not be constructed if the NSF is built. Plans for reconstruction of the Sprague Avenue interchange are carried forward in this FEIS.

All Second Avenue, Altamont and Custer ramps would be permanently closed with construction of the NSF. Third Avenue will provide a ramp access to the eastbound collector/distributor. The existing westbound off ramp to Third Avenue would be closed.

### ***I-90 — Sprague Avenue Interchange***

This state project, generated from the Four Lakes to Idaho State Line EIS, reconfigures the Sprague Avenue interchange. The design is now being finalized and involves the realignment of ramps connecting Interstate 90 and the local street system. Modifications are based on increasing the safety and efficiency of the interchange operation. The proposed design provides for a direct connection between I-90 and the county's proposed South Valley Arterial as identified below. The proposed NSF/I-90 Collector Distributor System design incorporates the new Sprague Interchange design.

### ***Division Street Improvements***

This state project, currently in progress, evolved from the 1987 "North Spokane Transportation Study: Short-Term Improvements." The study concluded that capacity improvements are required on Division Street (US 2 and US 395) to help accommodate traffic projections through the year 2000.

The project involves improving 5.6 kilometers (3.5 miles) of Division Street from the Spokane River north to Francis Avenue. Project design includes a four-lane couplet section from North River Drive to Euclid Avenue. The couplet includes four northbound lanes on Ruby Street and four southbound lanes on Division Street. North of Euclid Avenue, Division Street will be widened to three lanes each direction, with left-turn channelization. The first stage of the project, construction of the couplet section, was completed in the fall of 1994. The project is expected to be completed by the fall of 1996 1997.

### ***US 395 — Hastings to Milepost 172***

The first stage of this 9.7 kilometer (6 miles) long state project was completed in late fall of 1994. This included realignment of US 395 and construction of a new bridge over the Little Spokane River. The ultimate project involves upgrading US 395 to a limited access four lane divided roadway and constructing an

interchange at Hatch Road. The proposed alignment for the NSF connects to this project at the south end of the new bridge.

### ***Spokane County — Fancher Road Improvements***

Spokane County widened the section of Fancher Road from Sprague Avenue north to Broadway Avenue. The existing two-lane roadway was widened to four lanes with left-turn channelization. All construction was completed in the fall of 1994, except for the area at the intersection of Fancher Road and Sprague Avenue.

### ***Spokane County — South Valley Arterial***

~~The Spokane County Commissioners have approved the final EIS for the proposed construction of a limited access arterial from Thierman Road to US 27 (Pines Road) in Spokane County. This arterial would connect directly to the Sprague Avenue interchange at I-90. The Sprague Avenue interchange project discussed above would accommodate such a connection. The Transportation Improvement Board has approved the design and right of way appraisal stages for the first phase of the project. This first phase will construct a six lane facility from Thierman Road to Dishman Mica, and four lanes to University Road. Construction is scheduled to start in 1997.~~

The Spokane Board of County Commissioners have reopened the final EIS and commissioned a supplemental EIS to consider the construction of a one-way couplet involving existing Sprague Ave. and a new roadway 1 to 2 blocks south beginning at Thierman Road and continuing to University Road. This proposed arterial places one-way westbound traffic on 4-lanes of existing Sprague Ave. and one-way eastbound on the new 4-lane roadway. The Sprague Ave. interchange project discussed above would accommodate such a connection. The Transportation Improvement Board has approved preliminary design and right-of-way stages for the first phase of the project. Construction is scheduled to begin in 2000.

### ***Spokane County — Northside Arterial Project***

The county has submitted a request for Transportation Improvement Account (TIA) funding on a project involving construction of a 10 kilometer (6.2 mile) four-lane facility with left-turn lanes between Argonne Road/Bruce Road and US 395. This project intersects the proposed NSF project (North Option only) in the vicinity of Stoneman Road. The NSF EIS has studied a Stoneman Road interchange footprint for the purposes of a future connection. TIA funding has not been approved.

### ***Spokane County — Hastings/Farwell Road Improvements***

The section of Hastings/Farwell Road between US 395 and US 2 ~~is scheduled to be~~ **has been** widened. TIA funds ~~have been approved and the design is complete~~ **were used** to improve the existing road from two lanes to four lanes with left-turn channelization.

## **Spokane County — North Metro Arterial Road Plan**

The updated county North Metro Arterial Plan has been drafted and includes discussion of a county “Beltway/Loop Arterial.” However, the plan has been shelved until the area’s Growth Management Plan is developed. The purpose of a “Beltway/Loop Arterial” is to handle traffic generated from the continued urbanization of the area. The question as to how this system will work with growth management has yet to be determined.

The proposed plan update also includes the NSF. The “Beltway/Loop Arterial” includes various alternatives to the development of an arterial that would circle the city. Components for the northern region of Spokane include the West Plains Bypass and the Millwood Bypass.

Both the NSF and a portion of the “Beltway/Loop Arterial” system are identified as components in the “Facilities Element” of Spokane’s 1985 Regional Transportation Plan. In the 1985 Plan, the corridor for the northeast section of the “Beltway/Loop Arterial” was identified as the Argonne Corridor.

Each facility has been shown to serve different purposes in the regional transportation system. For this reason, the timing for each is different. The immediate need is relief for the existing north-south arterials that currently serve regional bypass traffic, the Central Business District (CBD), and traffic exchanges between the major growth areas of the region. The NSF is designed to accomplish this. The “Beltway/Loop Arterial” is less effective in this objective; however, it does a better job of removing traffic from the CBD section of I-90 by allowing traffic destined for the northern part of Spokane an alternative to the existing major north-south routes. Timing of the need for the “Beltway/Loop Arterial” is projected as about 2020, when I-90 in the CBD starts having capacity problems.

## **Project Alternatives Considered**

### ***No Build***

The No-Build Alternative involves maintaining the continued operation of the existing roadway system including needed safety improvements.

### ***No Build With Transportation System Management (TSM) and Transportation Demand Management (TDM)***

This alternative includes consideration of such things as intersection improvements, and timing plans and interconnected signals along parallel arterials. TDM includes measures such as ridesharing and commute trip reduction programs.

### ***Mass Transit***

A Mass Transit Alternative would include construction of High Capacity Transportation (HCT) systems such as bus and rail systems.

## **Build Alternatives**

### **Improvements to Existing Facilities**

Improvements to existing facilities would include new two-way left-turn lanes; major intersection modifications (such as right-turn lanes); and roadway widening to accommodate new lanes the whole length. All these improvements would be used to create more system capacity and serve as an alternative solution to building a complete new facility.

### **New Facility**

This EIS has been built on the findings and recommendations of previous studies related to the NSF, including the 1985 Spokane Regional Transportation Plan and the 1988 “North Spokane Transportation Study: Long-Term Transportation Improvements.” The “build” corridors that served as the starting point for this study are as follows and are identified in Figures S-2 through S-3, Original Study Corridors.

- Hamilton/Perry
- Market/Greene
- Havana

#### *Common to Both the Market/Greene (Preferred Alternative) and Havana Alternatives*

- North Connection Option
- South Connection Option
- I-90 Collector Distributor (C/D) System

The Market/Greene route with North Option connection and I-90 Collector Distributor (CD) has been designated as the preferred alternative.

Traffic projections for the year 2020, with the NSF connected directly to I-90, show traffic in the section of I-90 between Liberty Park interchange and Sprague Avenue interchange increasing from the existing 90,000 vehicles per day to over 196,000 vehicles per day. Construction of a collector distributor (C/D) system has been determined to be the most efficient method to handle the projected traffic.

Construction of a new facility would be only part of the transportation solution. The continuation and further development of the TSM and Mass Transit alternatives would happen concurrently, and all these components would combine to make a complete area transportation system.



## **Major Metropolitan Investment Study (MIS)**

The need for this new study element stems from requirements of Intermodal Surface Transportation Efficiency Act (ISTEA) legislation to combine the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) long-range planning processes to meet with changes in transportation planning and funding. Because the NEPA process for this project was well underway when this new requirement was mandated, the MIS discussion was incorporated into Chapter 2 of this NEPA document. The MIS focus is to describe each alternative's effectiveness in accommodating or reducing the capacity/demand projections for the project design year of 2020.

## **Alternatives Rejected From Further Study**

- ~~No Build Alternative~~
- No Build With TSM and TDM
- Mass Transit

Both of ~~the~~ these alternatives were considered and studied through completion of the project expertise studies. The individual study findings, coupled with the results of the MIS, show that each fails to meet all or key project purpose and need objectives. Consequently, they were eliminated from further consideration.

The MIS addresses the effectiveness of each alternative in meeting projected traffic demand and capacity needs, as stand-alone solutions and in combination. The MIS findings support the conclusion that additional capacity is needed after implementation of these programs. When considered as stand-alone solutions, neither of these alternatives satisfies the projected system demand/capacity needs as effectively as the construction of an NSF. The conclusion drawn from the MIS is that only when considering a complete system of programs; i.e., new facility plus the mass transit and TSM solutions identified above, are the Spokane area transportation needs shown to be effectively addressed.

- Improvements to Existing Facilities

This alternative failed to meet key project objectives, primarily in the area of effectively reduced travel times and efficient multimodal and intramodal movement of goods and people.

- Hamilton/Perry Alternative

The Hamilton/Perry Alternative was dropped from further evaluation during Final Study Plan preparation. Key reasons included past and present neighborhood controversy, conclusions from past studies, inconsistency with local plans, and numerous adverse environmental impacts. Alternatives Selected for Further Study

## **No Build**

The No-Build Alternative involves maintaining the continued operation of the existing roadway system including needed safety improvements.

## Build Alternatives

The alternatives carried forward and presented in this document as the best long-term transportation solution for the Spokane area, involve constructing a new facility. The new facility routes examined were:

- Market/Greene (Preferred Alternative)
- Havana

### Common to Both the Market/Greene (Preferred Alternative) and Havana Alternatives

- North Connection Option (Preferred Alternative)
- South Connection Option
- I-90 Collector Distributor (C/D) System (part of the Preferred Alternative)

As noted above, construction of a new facility would be only part of the transportation solution. The continuation and further development of the TSM and Mass Transit alternatives would happen concurrently, and all these components would combine to make a complete area transportation system.

## New Facility Construction Cost

Table S-1 shows construction cost estimates in millions of (1994) dollars.

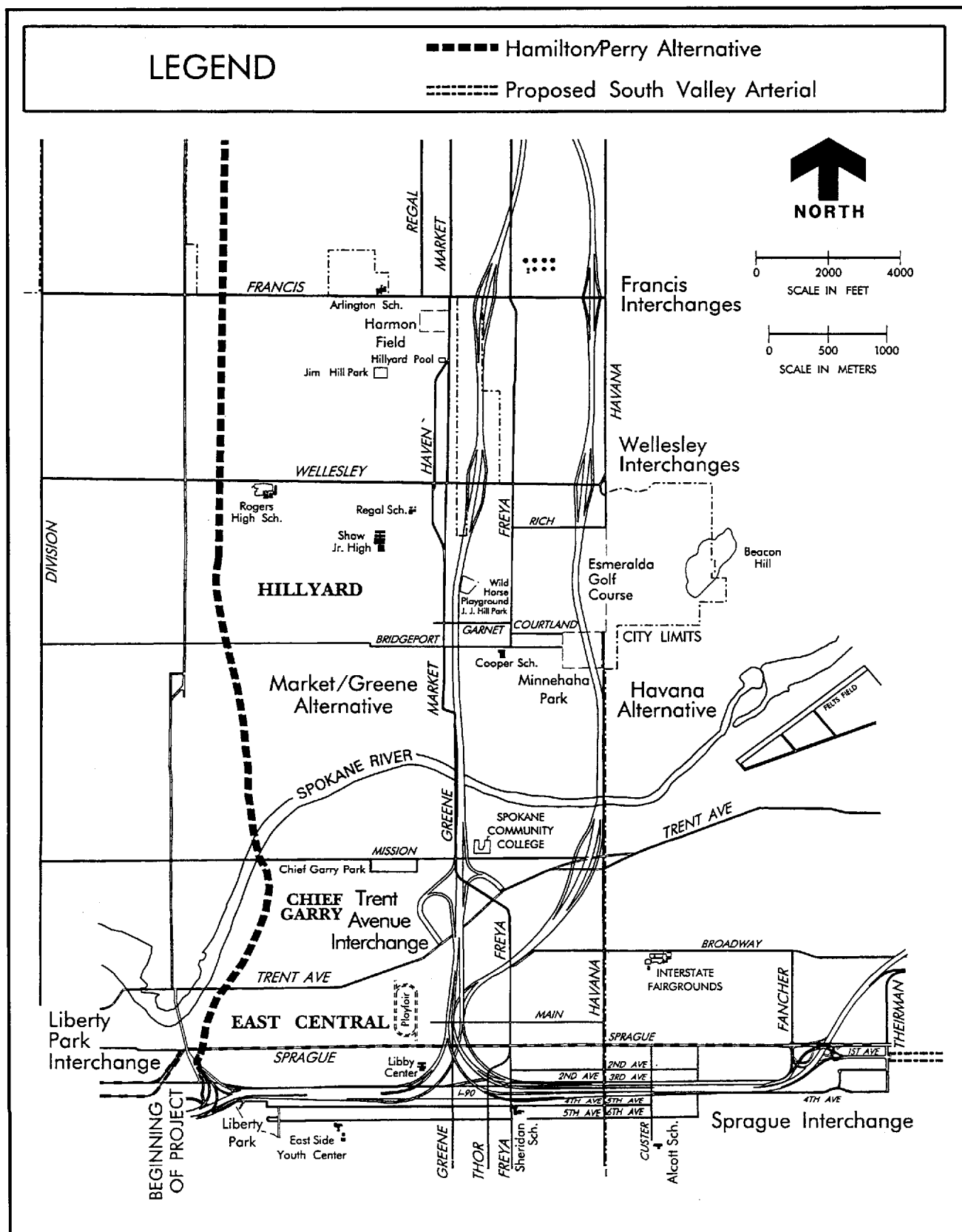
Market/Greene With North Connection	Market/Greene With South Connection	Havana With a North Connection	Havana With a South Connection
\$875	\$843	\$854	\$812
Based on a 20-year schedule, the inflated cost equates to approximately \$2 billion.			

### Construction Cost Estimates (in millions of [1994] dollars)

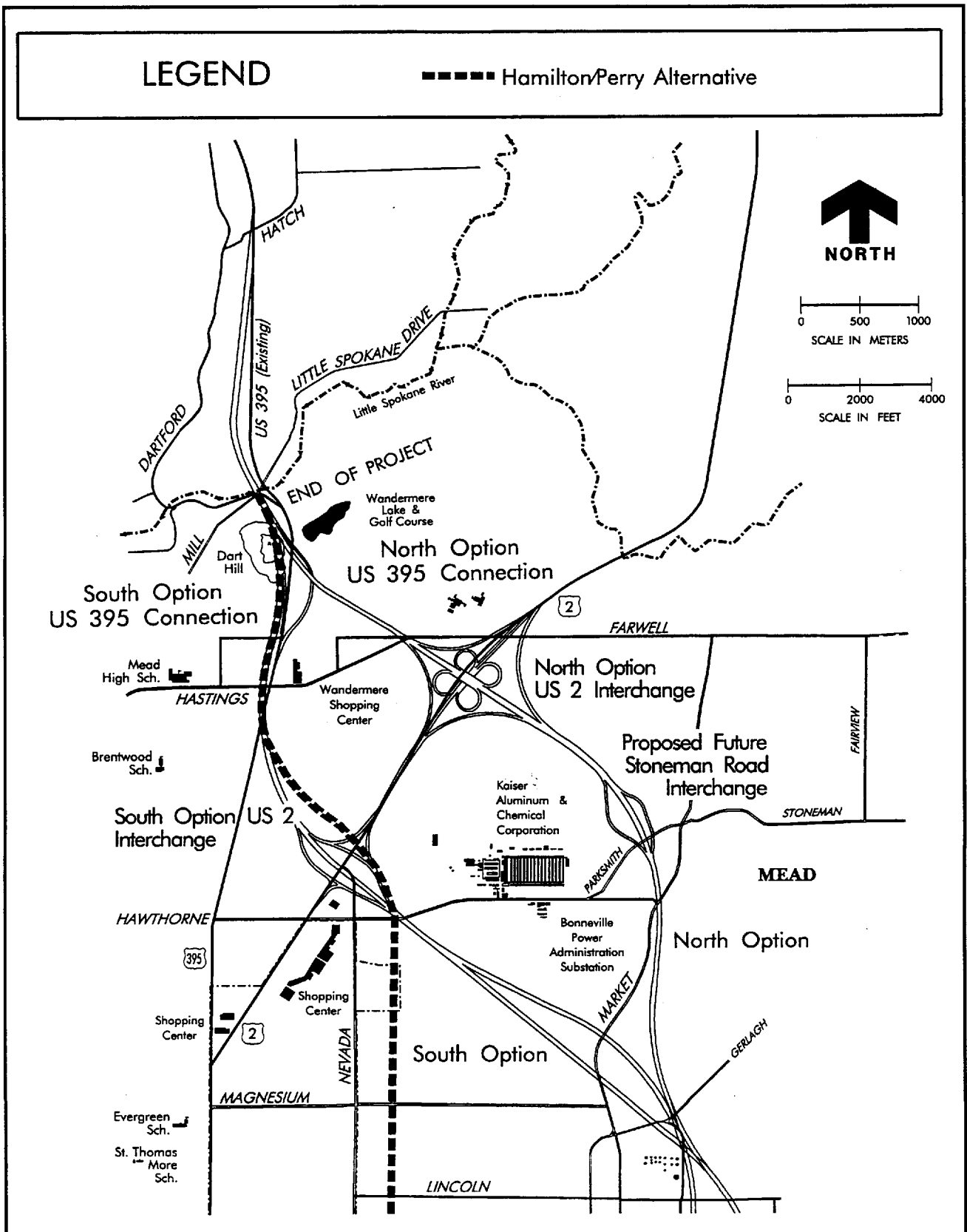
Table S-1

## Project Schedule

Construction for all alternatives is anticipated to take about 20 years, based on estimated funding availability of \$40 to \$43 million per year. Funding beyond completion of the EIS is currently unavailable. The earliest construction would start is about 2000, with a corresponding completion date of around 2020. Because of the time required to construct the entire project, construction would be staged so that the public could use portions of the roadway, possibly as early as 2005.



**North Spokane Freeway Original Study Corridors**  
**Figure S-2**



**North Spokane Freeway Original Study Corridors**  
**Figure S-3**

# Major Environmental Impacts

## *Biological/Physical Impacts*

### **Air Quality**

All build alternatives will be within the National Ambient Air Quality Standards (NAAQS) for 2010 and the design year of 2020. Initial analysis of the Market/Greene Alternative with a South Option identified the NAAQS being exceeded at the Mission/Trent intersection. The intersection was redesigned, and the subsequent air quality analysis showed that with the proposed channelization changes, the level of service could be improved to a point necessary to bring the area within the NAAQS.

According to a letter from the Spokane Regional Transportation Council (SRTC) dated February 24, 1995, the NSF would decrease regional emissions by 3.6 percent. Based on the SRTC analysis, the NSF would have a positive impact on the region's air quality.

Because no construction money is available at this time, not all of the project can be included in the three-year Transportation Improvement Program (TIP). A TIP is a transportation investment strategy required under ISTEA. It addresses the goals of the long range plans and lists priority projects and activities for the region. This project is in compliance with the federal conformity rules under 40 CFR Part 51 because Spokane has a conforming Comprehensive Plan that includes the NSF. The approved Transportation Plan for Spokane meets the Clean Air Act State Implementation Plan (SIP) and includes the NSF. Each phase or segment of the NSF will need to be programmed into a TIP.

### **Noise**

Several areas along the proposed "build" corridors and I-90 will experience noise levels exceeding FHWA noise abatement criteria. Mitigation was examined for all areas to determine whether it was reasonable and feasible at each location. Table S-2 provides a list by "build" alternative of the proposed locations of noise walls.

	<b>Market Greene</b>	
<b>Freeway Segment</b>	<b>Side of Road</b>	<b>Proposed Wall Length Meters (feet)</b>
Trent-Mission to Grace Ave.	West	1,000 (3,200)
	East	700 (2,200)
Grace Ave. to Wellesley Ave.	East	1,300 (4,200)
Stone Rd. to US 2 (North Option Only)	East	370 (1,200)
	<b>Havana</b>	
<b>Freeway Segment</b>	<b>Side of Road</b>	<b>Proposed Wall Length Meters (feet)</b>
Trent-Mission to Euclid Ave.	West	1,000 (3,200)
Stone Rd. to US 2 (North Option Only)	East	370 (1,200)
	<b>I-90 C/D</b>	
<b>Freeway Segment</b>	<b>Side of Road</b>	<b>Proposed Wall Length Meters (feet)</b>
Perry Street to Fancher Road	North	3,830 (12,500)
	South	4,760 (15,600)

## **“Build” Alternative Noise Wall Locations Summary**

### **Table S-2**

#### **Energy**

Operation of any of the new “build” routes would save between 3,997,395 liters (1,056,000 gallons) and 6,389,775 liters (1,688,000 gallons) of gasoline annually.

#### **Geology and Soils**

Topography will be altered through cut and fill slopes, embankment material, excavation, disposal of waste materials, retaining walls, ditching, and trenching.

No impacts are expected from operation of the proposed project due to erosion (wind or water) or altered topography (includes natural drainage channels). Rivers, streams, creeks, wetlands, etc. will be avoided or spanned by bridge structures. Best Management Practices (BMPs) will be used to prevent long-term erosion (wind or water) on any embankment, roadway shoulder, drainage channel segment, or graded section.

#### **Waterways and Hydrological Systems**

Because this project is located over the sole-source Spokane Aquifer, consultation with the Environmental Protection Agency (EPA) will continue over the life of the project. BMPs will be employed during construction and operation of the facility to ensure compliance with federal, state, and local water quality requirements, resulting in no impact to the aquifer.

#### **Flood Plains**

The river banks in the vicinity of the Market/Greene Alternative are already artificially stabilized both up- and downstream from the existing Greene Street Bridge. A new bridge at Havana could affect the meander pattern of the Spokane River. However, both the proposed Market/Greene and Havana structures will have bridge abutments and approach fills outside the wetlands and the 100 year flood plain. Bridge piers will most likely be located in the FEMA floodway or 100 year flood plain, depending on final design.

Communication with the Corps of Engineers indicates there are no major problems with piers within the waterway zones. Any increase in high water levels due to floodway/flood plain encroachment (piers only) will be negligible and within allowable limits of city shoreline and flood plain regulations.

### **Water Quality**

Storm water runoff can transport pollutants to both surface and sub-surface receiving water bodies. Pollutants include dissolved solids, chloride, temperature, zinc, copper, nitrates and nitrites, phosphorus, turbidity, suspended solids, dissolved oxygen, chemical oxygen demand, and lead. Of these, dissolved and suspended solids from roadway sanding, chlorides from deicing salts, and lead from vehicle fuels are the pollutants most likely to originate from operation of the roadway. Residual hydrocarbons from unburned fuel and spilled lubricants are also pollutants of potential concern.

No ~~substantial~~ impacts due to storm water runoff are projected on any of the proposed NSF alternatives. This is possible through the use of water quality/quantity treatment and infiltration BMPs.

Storm water runoff will be directed away from rivers, creeks, and wetlands. Discharge to surface water bodies will be avoided.

### **Wetlands**

Evaluation of impacts on wetlands included consideration of the ~~extent of wetland encroachment~~ **extent of encroachment upon wetlands** for each alternative, and the potential impacts of this encroachment on wetland functions and values. All proposed NSF routes fall within urban areas where even the least developed land has been heavily impacted by human activities (e.g., clearing, pasturing, farming, frequent traversing by vehicles, illegal dumping, and close proximity to developing areas).

No impact to any wetland within, or in the vicinity of, the NSF route corridor is expected, due to the following measures:

- Storm water discharge to surface water bodies will be avoided by use of properly maintained permanent water quality/quantity treatment areas and infiltration BMPs.
- Permanent erosion and sediment control measures (BMPs) will be properly maintained to ensure that wetland filling and river/creek sediment contamination do not occur.
- The drainage system that moves highway storm water runoff away from wetlands, rivers, and streams will be properly maintained.

### **Wildlife, Fisheries, and Vegetation**

#### *Wildlife*

The overall development generated by this project will have minimal impact on the area's wildlife. Species sensitive to the impacts of human activities/urbanization have already been displaced or are in the final process of being displaced by increased development. This development has been occurring for many years (prior to the NSF project) and is continuing along each of the proposed NSF "build" routes.

Wetlands along the Spokane River will be spanned by the proposed structure, thus avoiding direct impacts to the adjoining wildlife habitat.

No endangered or threatened wildlife or fish species were found (known, recorded, or observed). Also, no known, recorded, or observed wildlife migratory route or fish feeding route was found within any of the proposed NSF alignments.

### *Vegetation*

Vegetation types present in the affected areas are common or introduced species and any plant losses are not considered to be substantial. Vegetation planted in the right of way would be sustainable native species that are fast growing, provide the best erosion control, and are aesthetically pleasing.

### *Fish*

Fish habitat should not be lost, but may be temporary degraded. Excessive sediment due to erosion during spawning times could affect egg development and deplete insects and other food sources. This will be avoided by use of BMPs. Stormwater runoff will be directed to water quality and quantity treatment structures prior to discharge to rivers, creeks, and wetlands. ~~Storm water runoff will be directed away from rivers, creeks, and wetlands.~~ Discharge to surface water bodies will be avoided when possible through the use of infiltration best management practices.

### **Farmland**

Table S-3 shows the amount of farmland that will be acquired. The impact of the land acquired from the designated farmlands is not substantial and is in compliance with the Farmland Protection Policy Act. A Farmland Conversion Impact Rating was developed, showing a rating between 87.0 and 116.0, depending on the alternative. This is below the 160 point threshold that is the point at which further detailed evaluation is required.

Alternative	Area of Prime Farmland and Farmland of State Importance
	Hectares (Acres)
Market/Greene w/North Option	1.44 (3.6)
Havana w/North Option	4.4 (11.0)
Market/Greene w/South Option	2.08 (5.2)
Havana w/South Option	5.04 (12.6)

### **Farmland Conversion Summary**

**Table S-3**



## Social/Economic Impacts

### Right of Way Requirements for the Proposed Build Alternatives

Table S-4 is a summary of total estimated land required for the NSF project.

	Route	Total land Required Hectares (Acres)	Length Kilometers (Miles)
<b>Market/Greene:</b>	156 hectares (385 acres)	351 (867)	15.9 (9.9)
	Plus		
<b>North Option:</b>	195 hectares (482 acres)		
<b>Market/Greene:</b>	156 hectares (385 acres)	316 (780)	16.0 (10.0)
	Plus		
<b>South Option:</b>	160 hectares (395 acres)		
<b>Havana:</b>	154 hectares (380 acres)	354 (874)	16.4 (10.2)
	Plus		
<b>North Option:</b>	200 hectares (494 acres)		
<b>Havana:</b>	154 hectares (380 acres)	303 (747)	16.7 (10.4)
	Plus		
<b>South Option:</b>	149 hectares (367 acres)		
<b>I-90 C/D</b>		40 (99)	4.7 (2.9)

### Right of Way Requirements for Proposed Build Alternatives

Table S-4

#### Community Cohesion

Arterial roadways will remain open both during and after construction of the project. Access for vehicles, pedestrians, and bicycles will be maintained with only temporary closures or detours. Streets that are closed should not isolate any areas, although access may require additional travel distance.

Few residential areas will be separated by the project. In many cases, existing roads or topography within the project footprint mark the present boundaries between various areas within the city and county. The proposed project routes parallel or pass over these existing neighborhood boundaries and use topography to minimize impacts as much as possible. In most cases, access to community facilities will be unaffected.

Placement of the I-90 interchange connection bisects the East Central neighborhood between I-90 and First Avenue. The “build” routes expand the north/south gap, which reduces residential use and could displace the remaining residential area east of Freya, between I-90 and Sprague, through redevelopment to multi-family housing and/or commercial uses. A few houses would remain between the interchange and Freya Street, but these could be displaced by commercial uses.

All build alternatives require construction of the collector/distributor and the NSF interchange with I-90. The land west of Havana Street and along I-90 that is needed for construction of these 2 project elements is inside the East Central neighborhood. East Central is a Community Development neighborhood with 29 percent of its families below poverty level. The 1990 census data reports that only 72% of the 4300 households had earnings in 1989. Close proximity to the Trent Industrial area, the south hill health care complexes, Sprague and Division Street commercial strips and the Spokane's central business district are reflected in the varied employment characteristics of this neighborhood. Average earnings of the workers from this neighborhood, with high percentages employed in administrative support and service occupations was a little over \$22,000. Owner occupied housing is 54%, slightly lower than the city-wide average.

The East Central Neighborhood is a racially diverse neighborhood. The majority population is white (81%) and about half of the minority population is black (9%).

The proposed I-90 interchange connection does not bisect the East Central Neighborhood between I-90 and First Avenue. Contrarily, the interchange will improve the East Central Neighborhood's accessibility to and from the I-90 interstate corridor to the east and to the west. In addition, East Central Neighborhood residents on either side of I-90 in this neighborhood will now have a direct corridor linkage to retail and service centers, public and private parks, golf courses and other recreational facilities as well as a direct connection to north Spokane, Stevens, Ferry, and Pend Oreille counties, British Columbia and the Fraser River Valley via US 395. There will be **no new** or distinguishable bisectational or corridor divisional impact on the subject East Central Neighborhood following construction of the proposed I-90 interchange. The I-90 corridor will pass through the neighborhood in the same travel pattern it does today. WSDOT has committed to aggressively work with and pursue city officials, neighborhood community leaders, civic organizations, and social service agencies and providers through the planning process to ensure that the East Central Neighborhood is represented and involved in addressing neighborhood issues related to this project.

To date, the 2 primary issues raised or received at open houses and other meetings concerning the East Central Neighborhood pertain to traffic circulation and low-income housing. People responding on comment forms indicated a preference for a build alternative but desired a more direct connection to the NSF than design parameters allow. The access points for this neighborhood are at Liberty Park, Sprague and Trent Avenue Interchanges. Low-income housing (LIH), though less frequently commented upon by those attending public meetings and open houses, is an issue that WSDOT is addressing through identification of impacts, and appropriate commitments. Recently WSDOT made an estimate of available housing stock in the East Central Neighborhood. Having ascertained that an adequate housing stock exists this issue is seen as manageable. As public inquiries arise on this issue WSDOT conveys this information to those concerned. Public involvement meetings will continue in an effort to further understand the needs of the neighborhood and to share aspects of the project that influence this (and each) neighborhood. No controversies have been raised during open houses and other

meetings held to address the neighborhood's concerns from either the residential or business community. Public input was received from area residents outside the project impact area but not from those households who could incur varying degrees of disruptive or outright displacement impact due to the construction of the new I-90 interchange connection.

## **Recreation**

Several recreational properties will experience direct impacts as a result of construction of a "build" alternative. The C/D expansion, common to both alternatives, requires property from Your Place Park. The Havana Route requires property from Minnehaha Park and Esmeralda Municipal Golf Course.

Common to both the Havana and Market/Greene alternative's South Option is the displacement of the private Pine Acres Golf Course which does not fall under 4(f) considerations.

In addition to the direct impacts, the "build" route will pass near numerous recreational facilities, such as school playgrounds and neighborhood parks. Impacts to these areas include visual, noise, and access disruptions. None of these impacts, nor any warranted associated mitigation, are expected to substantially impair any of the facilities' attributes, features, or activities.

## **Regional and Community Growth**

~~Due to the adequate availability of land in the project area, changes in Spokane County's population are expected to be insignificant. Lands around the project area are identified as significant growth areas. Continued growth in these areas is projected through the project design year and beyond. Pressure for commercial development is expected at interchanges. All growth will be dependent on the Growth Management Act.~~

The preferred alternative is consistent with the city of Spokane's Transportation Plans and is recognized by Spokane County as the preferred alternative to serve future capacity for north/south traffic.

Presently the city of Spokane and Spokane County are working on determining the Interim Urban Growth Boundaries as required under GMA. Within this process the city of Spokane is currently identifying the carrying capacity of the system (i.e. transportation and storm water) to better determine these Urban Growth Boundaries. The city of Spokane is also in the process of updating their Comprehensive Plan which will also assist in determining their Interim Urban Growth Areas and updating their Comprehensive Plan.

Each of the proposed build alternatives addressed in this document is in compliance and supports the objectives and goals of both the city of Spokane's comprehensive planning of record as well as issues and concerns which have been brought forward by local residential members of the city's community citizen planning committee. The corridor alignments and termini locations of the build alternatives proposed for the NSF were selected because they respond to and accommodate the urban growth patterns called out in the current local and regional comprehensive planning of record. Both the county and city have drafted updated comprehensive plans. Both plans include WSDOT's proposal for a north/south corridor from I-90 north, an

I-90 collector-distributor, and a new I-90 interchange in the Thor-Freya vicinity. Neither plan proposes changing the current urban growth boundaries for the region. Numerous open houses and meetings with neighborhood associations within the project impact area have taken place during the planning phase to ensure that homeowners, renters, and other concerned citizens would have an active role during the planning process. No issues of significant negative concern have been presented at these public open houses. This project, under either of the corridor alternatives or route design options being considered, will not influence or divert future unavoidable growth in a manner which would be inconsistent with either individual neighborhood or regional planning goals.

The urban boundaries for the Spokane metropolitan area have been identified in both the City and County of Spokane's comprehensive plans as well as the Spokane Regional Council's Regional Transportation Plan. These plans as well as the Congestion Management System (CMS) plan for Spokane recognize the NSF corridor as a critical component to congestion mitigation for north Spokane. Construction of either the Market /Greene or the Havana corridors with either of their respective north or south alignment options in the northern most segment of this project is not anticipated to result in alteration to the region's established urban boundaries as currently defined. This analysis holds true for the proposed Collector Distributor along I-90 as well. Members of the citizens participation plan have not openly expressed or submitted anything in writing addressing their concern that the NSF proposal will redirect or alter growth within their urban neighborhoods.

## **Services**

Temporary disruptions in services within the corridor are expected during construction of the facility. Once the NSF is operational, services will experience minimal impact.

## **Pedestrian/Bicyclist Facilities**

### *Pedestrian Facilities*

Existing pedestrian crossings located on I-90 at Magnolia, Regal, and Custer Streets will be lengthened to accommodate the addition of C/D lanes. A new pedestrian crossing is proposed in the Wild Horse Park/Hillyard area to allow more direct access to and from schools and the business district. All crossings will remain at their present locations.

### *Bicycle Facilities*

There will be no direct or permanent impacts to existing bicycle facilities or routes.

Second Avenue west of Freya Street will be eliminated by expansion of the new freeway C/D lanes. According to the SRTC Plan, a bike route is planned along 2nd Avenue (3rd Avenue east of Havana Street); this proposed route is impacted by the freeway west of Freya Street. A new pedestrian/bike path is proposed to provide the needed connection through this area.

## **Employment**

Table S-5 shows the approximate number of businesses and employees affected by each alternative. Overall, development of a North Spokane freeway is not expected to have a significant impact on population or employment growth patterns presently established in city and county land use guidelines.

<b>Alternative With Option</b>	<b>Approximate Number of Businesses</b>	<b>Approximate Number of Employees (rounded)</b>
Market Greene with South Option	68	1020
Market Greene with North Option	65	810
Havana with South Option	96	1360
Havana with North Option	89	1110
Collector/Distributor and Interchange at I-90	50	410

## **Number of Businesses and Employees Affected**

**Table S-5**

### **Tax Revenues**

Land required for right of way would displace some businesses and residences, resulting in a net loss of taxable land. This would be offset by the shift of displaced businesses and residences to other sites within the metropolitan area. No large retail areas, which are major generators of tax revenue, would be displaced or disrupted.

### **Property Values**

Values of residential property adjacent to the freeway right of way are expected to be impacted. The actual impact will depend on factors such as housing availability and noise impacts. The marketability of vacant industrial and commercial properties in some areas, such as east of Hillyard, will be enhanced by construction of the freeway and the improved access that will result.

### **Relocation**

Table S-6 shows the number of residences and business that would require relocation under each of the 'build' alternatives. Table S-7 depicts these same displacements for the preferred alternative but with an emphasis on the neighborhood from which the displacements occur. All qualified displaced residences and businesses would be relocated and compensated for under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

DISPLACEMENTS BY ALTERNATIVE							
Locations	Single Family (includes mobiles)	Multiple Family Units (includes duplexes, apartments & condos)	Total Housing Units	Persons Per Household	Persons Displaced	Businesses Displaced or Disrupted	Employees Displaced or Disrupted
Interstate 90 Collector/Distributor and Interchange, (Liberty Park to Sprague Avenue, South of Main Street	368	51	419	2.5	1050	50	410
Market-Greene Alternative (Preferred Alternative), (Beginning at Main St. & ending at Lincoln Road)	52	2	54	2.6	140	50	630
Havana Alternative, (Beginning at Main St. & ending at Lincoln Road)	110	0	110	2.6	290	78	970
North Option (Preferred) Connection, (From Lincoln Road to SR 395 )	30	0	30	3.1	90	(15 / 11)	(180/140) *
South Option Connection, (From Lincoln Road to SR 395	16	0	16	3.1	50	18	390
Havana Alternative Totals, (NSF I/C at I-90, Havana with North Connection	508	51	559	2.5 -3.1	1430	139	1520
<b>Preferred Alternative</b> Totals, (NSF I/C at I-90, Market Greene with North Connection	<b>450</b>	<b>53</b>	<b>503</b>	<b>2.5 to 3.1</b>	<b>1280</b>	<b>115</b>	<b>1220</b>

**Residential and Business Displacements by Alternative**  
**Table S-6**

DISPLACEMENTS BY NEIGHBORHOODS							
Locations	Single Family (includes mobiles)	Multiple Family Units (includes duplexes, apartments & condos)	Total Housing Units	Persons Per Household	Persons Displaced	Businesses Displaced or Disrupted	Employees Displaced or Disrupted
East Central Neighborhood, (South of Trent Avenue)	327	47	374	2.5	930	66	660
Chief Garry Neighborhood, (North of Trent to Spokane River)	0	0	0	2.4	0	17	140
Hillyard Neighborhood (on Preferred Alternative), (North of Spokane River to North/South Connections)	52	2	54	2.6	140	17	240
County ( Preferred Alternative), (East of Havana along I-90 combined with all of the North Connection)	71	4	75	2.5 -3.1	210	15	180
<b>Preferred Alternative</b> Totals, (NSF I/C at I-90, Market Greene with North Connection)	<b>450</b>	<b>53</b>	<b>503</b>	<b>2.5 to 3.1</b>	<b>1280</b>	<b>115</b>	<b>1220</b>

## Nearby Residential & Business Displacements - Preferred Alternative

Table S-7

## **Hazardous Waste**

A corridor level Initial Site Assessment (ISA) was performed on the “build” alternatives to determine known and suspected contaminated sites. The ISA determined there are a total of 98 hazardous waste sites along the proposed alignments. There is a potential to discover contaminated soils and buried hazardous/toxic materials along all the project corridors. Specific areas include the industrial area between I 90 and the Spokane River, the vacant Burlington Northern Railroad (BNRR) property east of Hillyard, and around the Bonneville Power Administration (BPA) and Kaiser Aluminum and Chemical Corporation (KACC) properties. The North Market Superfund site is within the project limits; however, the proposed roadway alignments are designed to avoid direct impacts to the contaminated Superfund property. (The Department of Ecology was consulted during development of the design proposals.) Table S-7 shows a generalized breakdown of the distribution of the 98 sites, by alternative and option.

## **Hazardous Waste**

A corridor level limited Initial Site Investigation (ISA) was performed, identifying 108 potentially hazardous sites on or affecting the proposed alignments. The potential contaminated hazards found were: soils, groundwater, drinking water, and the possibility of buried hazardous wastes. Costs of a complete investigation along the proposed build routes were projected from the ISA. Clean-up costs for the preferred alternative have been estimated for this Final EIS. The total estimated potential investigation and remediation costs for the preferred alternative is \$37,275,000. Prior to acquisition of any needed property with suspected contamination, intrusive site investigations will be performed. The findings of these investigations may slightly affect the alignment, if that alignment can be adjusted to avoid or minimize a complex or expensive remediation process on particular sites. Those sites that are unavoidable and require cleanup will be remediated, where possible, prior to property acquisition and the start of construction. WSDOT policy for dealing with hazardous waste sites is to identify hazardous sites as early in the planning process as possible; avoid them if at all possible; clean-up by owner or responsible parties prior to acquisition; or obtain cost recovery from liable parties.

Potential exposure to hazardous materials is greatest during project construction. When hazardous materials are found, their disposal will be in accordance with federal, state, and local rules and regulations. Necessary permits will be obtained for each disposal option used. Based on the type of sites identified in the ISA, petroleum contaminated soil will be the main contaminate, several disposal methods are likely. They include thermal desorption, landfill, and bio-remediation/land-farming. Treatment of the contaminated substances may occur on site or at a satellite location. It should be noted that this list is not all inclusive and other methods may be considered more appropriate as technology advances and at a time closer to actual construction.



Table S-8 shows a generalized breakdown of the distribution of the 108 sites by alternative and option.

Route/Option	No. of Sites
I-90 Collector Distributor System	12
Market/Greene Alternative	38
Havana Alternative	34
South Option	12
North Option	12
	<b>Total 108</b>

## Summary of Hazardous Waste Sites by Route

### Table S-8

The estimate for total combined investigative and clean-up costs for the Preferred Alternative sites is 40.7 million dollars.

## Cultural Resources

The archaeological survey revealed the potential for four archaeological sites within or adjacent to the study area, all centered around the Hillyard area. Locations are imprecise, but are suspected presently identified to be outside the right of way footprint. Field surveys of the undisturbed land along the “build” routes revealed no indication that sites exist within the proposed right of way limits.

Five properties structures within the project area have been identified and determined to meet eligibility requirements for the National Register of Historic Properties Places (NRHP). The Havana Alternative passes adjacent to, or impacts, four of these properties structures. This route passes next to a historic house at the corner of Frederick Avenue and Havana Street. It crosses Minnehaha Park and passes adjacent to the stone building in the park. On its northern end, the Havana Alternative passes below and west of the Mount Saint Michael’s Scholasticate.

The last of the historic properties is the BPA Grand Coulee to Spokane Transmission lines. The South Option will pass beneath these lines but will not require tower or line relocation.

There are no historic properties along the Market/Greene Alternative and the North Option.

The State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP) were consulted on property eligibility and project impacts on the individual properties. Both SHPO and ACHP concurred in the finding that the NSF project would have no adverse effect on any of the five NRHP eligible properties.

## 4(f) Properties

There are 7 recreational properties adjacent to or within the right of way of the proposed “build” alternatives. All are considered to be 4(f) resources. Only three are considered to have substantial impacts that may impair the protected activities, features, or attributes of the property. The Final 4(f) Section of this document discusses impacts to the following properties.

Widening proposed along I-90 will directly impact “Your Place Park,” an .18 hectare (0.44 acre) city-owned park. Both the Havana and Market/Greene Alternatives would use a portion of this park for construction of the I-90 widening. The Havana Alternative directly impacts both Minnehaha Park, also eligible for the NRHP, and Esmeralda Golf Course. This alternative requires use of a portion of both of these properties for freeway construction. Avoidance alternatives examined include roadway realignment to the west of the properties, and tunneling through Beacon Hill. Both are very costly monetarily and/or in neighborhood impacts. However, with the Market/Greene Alternative designated as the Preferred Alternative, impacts to Minnehaha Park and Esmeralda Golf Course would be avoided.

### **Visual Quality**

The affected view from the facility differs according to the selected alternative. In most cases, the bridge structures will increase visibility toward the surrounding areas. In some cases, the proposed raised structures would enhance the motorist’s view of the mountainous regions to the east of the Market/Greene and Havana Alternatives. The visual variety and character of the countryside, as viewed from the elevated viaduct structure or high cut section such as proposed around Beacon Hill, would be amplified.

The visual quality of views toward the facility is greatly impacted by the raised alignment sections of the proposal. Proposed viaducts, bridges, and major arterial overcrossing structures will introduce or increase the “urban” visual element from park and recreational areas and residential neighborhoods located along the routes.

## **Important Issues (formerly Areas of Controversy)**

Two important issues, formerly considered areas of controversy have been resolved. These are the issues of affordable replacement housing for those families displaced by the project and of acceptable air quality for the Spokane region in regards to the projected changes from this project.

### **Housing**

The number of residential displacements has raised considerable concern in the impacted communities. Over 400 of the relocations would be in the area of the proposed I-90 widening and the NSF/I-90 interchange within the East Central neighborhood. There is a higher than average percentage of minorities in this neighborhood, and a high percentage of low income families. Although it is projected that many of the relocations will involve low cost housing, the actual number of low income homes has not been defined. Changes in the real estate market affect what is designated as affordable housing. The current tight housing market that has evolved over the past few years has fueled this issue by limiting the number of affordable homes. This has resulted in a community concern as to how this project will affect the availability of this type of housing.

A WSDOT Real Estate Services document dated March 29, 1995, states that there are “no disproportionately high and adverse human health or environmental effects on minority populations and low income populations” in accordance to Executive Order No. 12898.

Neighborhood communities along the build alternatives and their optional corridor segments as well as within the footprint of the I-90 Collector Distributor and Interchange proposed in the Thor/Freya vicinity have expressed their concerns as to the (1) the number of residential displacements which could occur and (2) what impact the unavoidable housing displacements would have on the “market availability” of affordable housing in their respective neighborhood as well as throughout the Spokane metropolitan area. WSDOT anticipated that the East Central Neighborhood would express the greatest concern because of the need to displace over 900 people along of Interstate 90; however there has been little concern expressed to date.

Through ongoing site evaluations of the corridor alignments under consideration the probability, as well as the magnitude of present and/or future community cohesion and perceived social impacts, changed from earlier projections. Several factors account for the reduction in public concern and greater public acceptance for this project. In summary, the following address the reasons for the change:

The number of residential and household displacements will be fewer than earlier projected. The decrease will be most prevalent along the I-90 collector distributor on either side of I-90.

About 35 residences included in the projected household displacements attributable to the right of way requirements for the I-90 collector distributor were located east of the termini of this project. The majority of these dwellings were included in the right of way required for the construction of the Sprague Avenue Interchange. The SW corner of 3<sup>rd</sup> and Thor Streets has also been cleared. The Sprague Avenue Interchange is a segment of the Four Lakes to Idaho State Line project. The referenced residential households were included in that project’s NEPA EIS which has been previously approved with a Record of Decision (ROD).

Affordable housing stock is expected to be available in the Spokane region as the project progresses. WSDOT has, by a decision of the IDT and approval of the Regional Administrator, made a commitment to provide “housing of last resort” if a shortage in housing stock occurs during the life of this project. In the event that replacement housing is not available within the displaced person’s financial means through application of any of the foregoing benefits, any number of other alternative solutions may be used. These alternatives, known as providing housing of “Last Resort,” include, but are not limited to:

- Purchasing housing for the displaced person and renting or selling the dwelling at a price within the person’s financial means.
- Renovating existing housing.
- Providing financing for homeowner-occupants with low-income and/or bad credit rating who have occupied their home for at least 180 days.
- Entering into partnerships with public or private agencies that provide housing for low-income persons.

See Relocation section of Chapter 4, “Mitigation”)

## **Air Quality**

Portions of Spokane County have been designated non attainment areas for carbon monoxide (CO) and particulate matter smaller than or equal to 10 microns in diameter (PM<sub>10</sub>). The NSF passes through this non attainment area. Neighborhood concerns have been raised about the effects a new freeway will have on both the CO and PM<sub>10</sub> concentrations.

Studies have been performed by SRTC which is assigned, by law, the responsibility to conduct modeling for NAAQS in the Spokane region. Modeling by SRTC shows that with construction of the collector distributor system and the North Spokane Freeway that Spokane will receive a 3.6% improvement in the carbon monoxide levels projected without this project. It is expected that air quality in Spokane will still be a serious issue but the NSF does not have adverse CO impacts because it improves traffic flow and falls under an adopted congestion management system plan.

## **Commitment List**

For brevity, the commitments listed are for the preferred alternative; the Havana and South Connection Option incorporate similar mitigation measures as discussed in more detail in the various Environmental Consequences section.

### **No-Build Alternative**

No commitments required.

### **Preferred Alternative (Market/Greene with North Connection including C/D System)**

#### **General Commitments**

1.—Coordination will continue with the affected neighborhood and housing groups, in particular the East Central neighborhood, throughout the design, right-of-way, and construction stages, to identify and address the special needs of low income, elderly, disabled, and minority populations. will help identify residents with special needs (for example, low income, single head of households, elderly, and disabled).

Coordination with local planning departments to develop strategies for minimizing overall neighborhood disruptions, isolation of specific neighborhood areas, and induced land use change will also take place throughout these stages. early in the process.

2. To ensure that all of the options applicable to the preferred alternatives meet NEPA requirements and are in compliance with the Environmental Justice Strategy outlined by Executive Order 12898, published in Volume 59, Number 32, of the Federal Register on February 16, 1994, the WSDOT will take actions to ensure that this project will not cause disproportionately high adverse health or environmental effects on minority and low-income populations.

3. In the event that replacement housing is not available within a displaced individual's financial means, WSDOT will ~~could~~ commit funds authorized for the project to provide such housing by constructing, relocating, rehabilitating, purchasing, renting, or otherwise financing the acquisition of necessary housing.

4. The NSF will be constructed in stages to allow for consideration and, if possible, accommodation of any High Capacity Transportation systems that are not already incorporated in the current design.
5. WSDOT commits to assess High Occupancy Vehicle (HOV) needs during each design stage ; design HOV lanes for the ultimate facility and operate HOV lanes on the North Spokane Freeway as warranted.
6. Although state and federal regulations do not require that a comparable business property be made available to a displaced business, WSDOT will make every effort to help business owners find suitable replacement sites and to move as quickly and economically as possible.
7. The NSF will provide park and ride facilities along the preferred alternative as shown in this FEIS or comparable facilities as coordinated with STA.
8. In the unlikely event that cultural resources are encountered during construction, work will be halted in the vicinity pending a review by a professional archaeologist in consultation with the FHWA, Office of Archaeology and Historic Preservation, and any other appropriate agency.
9. WSDOT will coordinate development of the park reconstruction plans and landscaping with the Parks and Recreation Department with involvement from each affected Neighborhood.
10. WSDOT will conform with the City and County of Spokane Wellhead Protection Plan once it is completed and approved.
11. WSDOT is committed to build the collector distributor system with construction of the preferred alternative.
12. The EPA has directed WSDOT to confer with Spokane County over matters related to the Spokane Sole Source Aquifer. WSDOT will continue to coordinate with the county on aquifer protection.
13. Top soil within the proposed roadbed will be removed, stockpiled, and replaced on all newly constructed areas that are to be re-seeded or planted. This will improve soil productivity and increase the vigor of the plantings.
14. Disruptions of access to prime farmland property will be coordinated with property owners to help minimize impacts to the operations of that property. An alternative form of temporary access to the affected parcels will be provided to mitigate any temporary loss of access.
15. Any topsoil removed from areas of prime farmland will be scraped and stockpiled for other uses.
16. WSDOT will coordinate closely with Spokane School District No. 81 and Mead School District No. 354 to ensure the safe passage of students to and from schools during construction.
17. WSDOT will coordinate closely with the city of Spokane and Spokane County fire districts and law enforcement agencies to ensure there are no disruptions to emergency response routes. Where rerouting is necessary, it will be planned well in advance of construction.
18. WSDOT will coordinate with all affected utilities to ensure that construction does not disrupt service. Both BNRR and UPRR will be consulted to coordinate

construction of overpasses, determine whether rail lines will be affected by construction, and determine impacts and mitigating measures for the rail line running to Kaiser.

19. WSDOT commits to funded congestion management system strategies related to the NSF as approved by SRTC and adopted by local government. These strategies are identified in Chapter 2 under Studies and Coordination and result in programs such as the Commute Trip Reduction Plan which was adopted in February of 1993.

20. WSDOT commits, that during the ~~scoping~~ design stage, project funds will be allocated to complete necessary determination of the extent of hazardous materials along the preferred alternative.

21. WSDOT commits to the Trent Avenue improvements discussed in the Air Quality section of this FEIS.

22. WSDOT is committed to preparing a detailed Relocation Plan prior to the commencement of acquiring property within each segment of the project(not to prohibit purchases in the public's best interest when approached by the property owner(s)).

23. WSDOT commits to continue coordinating with Spokane Parks Department the mitigation of impacted recreation and park facilities under their stewardship.

24. The final relocation plan will include an inventory of land available in affected neighborhoods, especially East Central, to relocate homeowners, businesses, and public facilities. This would help neighborhoods retain their character by limiting loss of neighborhood facilities and reinvesting in housing and businesses within the neighborhoods. For further information on residential and business displacements, see the Relocation section of this chapter.

25. WSDOT is committed to constructing walls that satisfy criteria for a reasonable (7 dBA) reduction in noise at a reasonable cost and also those walls found to be feasible at an acceptable cost. WSDOT will meet with neighborhood representatives and city and county planners during design and right of way acquisition phases to discuss impacts and possible mitigative effort beyond that required by noise abatement criteria. WSDOT commits to seek public opinion from affected neighborhoods in selecting barrier types for noise mitigation.

26. WSDOT commits to cover noise barriers with sound absorbing material whenever it would be effective in reducing noise from the tunnel-like geometry associated with barriers constructed on both sides of the freeway.

27. WSDOT commits to provide sidewalks at major arterial crossings of the North Spokane Freeway.

## **C/D System (Part of Preferred Alternative)**

1. Pedestrian crossings over I-90 currently located at Magnolia, Regal, and Custer Streets will be reconstructed.
2. Noise barriers will be constructed from about Perry Street (west end of the project area along I-90) to the vicinity of Fancher Road on the east end. Barriers would be placed on both the north and south sides of I-90, which would make for approximately 8590 meters (28,000 linear feet) of wall. Breaks in the barrier would occur in the I-90/NSF interchange area.
3. The excess right of way located along the north and south side of I-90 will be established as a buffer area. Any landscaping done will reflect the character of the adjacent neighborhood landscape, using non-intrusive vegetation. The section of buffer lying on the north side of I-90 between the Liberty Park interchange and the proposed NSF/I-90 interchange will include construction of a pedestrian/bike path. This will mitigate the loss of the bike lane proposed along Second Avenue in this area that will be eliminated with the proposed widening of I-90.
4. Impacts to Your Place Park will be mitigated by reconfiguring the park. Widening of I-90 will require acquisition of approximately one third of the existing 1800 square meter (17,700 square feet) park. The remainder will be adjacent to part of the right of way buffer area discussed above. Mitigation will entail using a portion of the buffer area to replace property acquired. Using the buffer area adjacent to the park and on the remainder of the half block will result in an increase of approximately 1,170 square meters (11,520 square feet) over the current park size. In addition, the pedestrian/bike path discussed in Number 3 above will connect to the park facility.
5. Visual and noise impacts at Your Place Park will be mitigated through constructing a retaining wall bordering the southern park boundary and a noise barrier along the C/D in this area. Additionally, the area immediately adjacent to the barrier will be landscaped. (See Number 2 and Figure 6-4 found in Volume 2.)
6. US West has requested early coordination (at least five years prior to construction) regarding potential impacts to its Keystone Exchange central office located within the I-90 C/D right of way footprint. It may be that the route can be shifted slightly to the north to avoid the Keystone Exchange central office. Coordination will be continued with US West throughout the design, right-of-way, and construction stages.
7. WSDOT commits to avoid any use of the Libby Center property.

## **Market/Greene Alternative (Preferred Alternative)**

1. Approximately 1700 meters (5400 linear feet) of noise wall will be constructed from the vicinity of the Trent Avenue Interchange north to the vicinity of Grace Avenue. This will include 1000 meters (3200 linear feet) on the west side of the NSF, coupled with 700 meters (2200 linear feet) on the east side.
2. Approximately 1300 meters (4200 linear feet) of noise wall will be constructed from the vicinity of Grace Avenue north to the vicinity of the proposed Wellesley interchange. The wall will be on the east side of the roadway only.



3. A new pedestrian crossing will be built in the vicinity of Wild Horse Park in Hillyard. The crossing will go over the NSF between the park and the vicinity of Market Street.

4. Crossing the SCC campus will take land area now used for parking. The design will include an elevated structure in this area allowing the space below to be used for activities such as parking or storage. Design will be developed to bridge buildings whenever feasible and prudent. This would also apply to the industrial area between Sprague and Mission Avenues.

5. The route crosses the Tuffy's Trail and the Centennial Trail on an elevated structure. Placement of bridge piers or other appurtenances on the trail will be avoided.

6. The Market/Greene structure will have bridge abutments and approach fills outside the wetlands and the 100-year flood plain, except for bridge piers. Piers will most likely be located in the FEMA floodway or 100-year flood plain, depending on final design. Cross sectional measurements of the river will be taken and modeled (using the FEMA computer model) to ensure that construction of the structure will not decrease the channel carrying capacity or increase the 100-year flood plain elevation by more than that allowed by the city of Spokane's Shoreline Master Program.

### **North Connection (Preferred Alternative)**

1. Approximately 370 meters (1200 linear feet) of noise wall would be constructed on the east side of the NSF in the vicinity of the Mead trailer park.

Table S-9 shows a list of permits and actions required by other agencies for the North Spokane Freeway.

Permit/Regulation	Issuing Agency(ies)
Section 404 Permit (Nationwide)	U.S. Army Corps of Engineers
Water Quality Certification	Submitted by Ecology to Corps.
New Source Construction	SCAPCA/Ecology
Forest Practices	Washington State Department of Natural Resources
Hydraulics Project Approval (HPA)	Washington State Department of Fish and Wildlife
Flood Control Zone Permit	City of Spokane and County/Ecology
Operating Permit for Surface Mining	Washington State Department of Natural Resources
Shoreline Management Permit	Spokane County/Ecology
Temporary Water Quality Modification Permit	Ecology
NPDES Baseline (Storm water) General Permit	Ecology

### **Required Permits**

**Table S-9**



## Preferred Alternative

After evaluating the remaining alternatives, Alternative 6, the Market-Greene Build alternative with the North Option Connection has been identified as the preferred alternative. The preferred alternative is the course of action that is the most desirable in terms of functional efficiency and social and environmental effects. Alternative 6 is the alternative that best meets the purpose and needs described in Chapter 1 of this statement. The North Option Connection is the most functional connection at no greater environmental cost than the South Option Connection.

Alternative 1, the No Build alternative, is undesirable because it meets none of the key objectives that define the purpose and needs of the EIS.

Alternative 7, the Havana Build alternative is less desirable than Alternative 6 because of impacts to Esmeralda Golf Course and Minnehaha Park both, classified as 4(f) properties. The golf course could no longer function as an eighteen hole course with the construction on the Havana Alignment. While Minnehaha Park would still be a city park the loss of land at this site could not reasonably be replaced to restore the park to its original size or condition. These impacts are avoided by selection of Alternative 6.

Operationally the Havana alternative would function similar to the Market-Greene route. Development of future HOV and Mass Transit would be hindered due to the location of the route on the east edge of the city of Spokane. Population densities will remain much lower along the Havana route than on the Market-Greene route.

The final adoption of an alternative and design has not yet occurred. The decision will be made by the Federal Highway Administration. They will publish a Record of Decision in the Federal Register no earlier than 30 days after the notice of availability of the FEIS.